SUM OF THE PARTS
PRE-VISIT ACTIVITIES

Vocabulary:

Point source pollution	Best Management practices	turbidity	watershed	
Non Point source pollution	sediment	contaminants	Surface runoff	

Lesson Learning Summary: Students learn how everyone contributes to the pollution of a river as it flows through a watershed and how that contribution can be reduced.

Lesson Objectives:

Students will:

- Distinguish between point and non-point source pollution
- Recognize that everyone contributes to and is responsible for a river or lake's water quality and Identify Best Management Practices to reduce pollution.

Skills Practiced:

Gathering information	Observing	Organizing	Analyzing	Applying
Identifying Components	Interpreting	Identifying cause and effect		

Helping Students Make Connections:

Have you ever been amazed at the amount of garbage left behind after a fair or concert? Each person probably didn't leave much on the ground. But with 500 or 1000 people in attendance the amount was large. Taking a closer look at how students can positively or negatively contribute to water quality helps them appreciate their role in water quality management.

Background Information:

The quality of water in a river or lake is a reflection of land uses and natural factors found in its watershed. When humans settle and develop land water quality is affected. Everyone bears responsibility for the health of a watershed and the water systems within a drainage basin. Individual actions, positive and negative add up. When we investigate land use practices we are concerned with two general sources of pollutants: non-point and point. Point source can be traced back to a specific point or source. Non-point can come from one of many places.

Warm Up:

Discuss the word watershed and its meaning in relation to some of the major rivers of the United States: Mississippi, Missouri, Rio Grande, Colorado, Hudson, and Columbia. Discuss some of the predominant types of land uses found along the rivers as they flow through their states and what downstream residents think about upstream uses.